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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,691	04/21/2006	Paul William Chapman	82047.008	1934

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Intellectual Property Dept.
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EXAMINER

LEE, GILBERT Y

ART UNIT	PAPER NUMBER
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3676

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket-ip@dewittross.com

Office Action Summary	Application No. 10/559,691	Applicant(s) CHAPMAN, PAUL WILLIAM	
	Examiner GILBERT Y. LEE	Art Unit 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 16, 18, 19 and 21-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 16, 18, 19 and 21-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed 4/30/10 has been entered.

Claim Objections

2. Claim 39 is objected to because of the following informalities: the second period should be removed. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 16, 18, 19, and 21-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1, 16, 23, and 27 disclose the cell length being in a bent state. The current disclosure does not enable how the cells are in a bent state through the loops and fasteners.

Claims 18, 19, 21-26, and 28-39 are rejected for depending on a rejected claim.

4. Claim 34 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 34 claims "different cells being bent to different degrees between the middles and ends of their lengths "; however, there is not support in the current disclosure for these limitations.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 16, 18, 19, and 21-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 16, 23, and 27 claim the cell being tensioned along the cell's length. It seems to the examiner that the claim is trying to claim a method of using the cells of the bed. The specification only describes a linear cell that is tensioned and bent only after inflation. The claim must be amended to recite the tensioning and bent shape in intended use format or must be claimed as a method. For purposes of this examination, the examiner is interpreting the claims to be claiming that the cells are capable of being tensioned along the cell's length.

Claims 18, 19, 21-26, and 28-39 are rejected for depending on a rejected claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1, as best understood, is rejected under 35 U.S.C. 102(b) as being anticipated by Cook et al. (US Patent No. 6,349,439).

Regarding claim 1, the Cook et al. reference discloses a pressure pad (e.g. Fig. 1) comprising at least two sets of alternately inflatable cells (e.g. 1 and 2), the cells having lengths extending linearly transversely along the pad (e.g. Fig. 1) and held in place on a pad base (Figs. 5A-5C) by:

a. loop straps (e.g. 20) fixed to the pad base and retaining the central region of the length of each cell, and

b. fasteners (e.g. Col. 3, Lines 41-48) releasably retaining each end of each cell to the pad base at a distance from the central region of the cell (Fig. 1),

such that each cell is tensioned along the cell's length (e.g. Figs. 5B,5C), with the cell's length being held in a bent state by the loop straps and fasteners with the cell's ends offset from the cell's central region (e.g. Figs. 5B,5C).

7. Claims 27-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Chapman et al. (GB Patent No. 2,319,721 A).

Regarding claim 27, the Chapman et al. reference discloses a pressure pad (Fig. 1) including:

- a. a pad base (e.g. including 13',13'',13''',14',14'',14''',15,16);
- b. at least two sets of alternately inflatable elongated cells (e.g. 1,2) atop the pad base (Fig. 4), the cells having lengths extending in tension across the pad base (Fig. 1), wherein the cells:

- (1) curve along their lengths (Fig. 1), and
- (2) are arrayed in interfitting relationship (Fig. 1) wherein each cell:
 - (a) receives an adjacent cell within its curve (Fig. 1), and/or
 - (b) is received within the curve of an adjacent cell (Fig. 1).

Regarding claim 28, the Chapman et al. reference discloses

- a. the cells, when inflated, being restrained to the pad base in the curved shape (Figs. 1 and 4), and
- b. the cells, when inflated, assuming a different shape when no longer restrained to the pad base (e.g. the tension from the fasteners will be eliminated and will cause a different shape).

Regarding claim 29, the Chapman et al. reference discloses the curves of the cells being aligned along a common plane (Fig. 1).

Regarding claim 30, the Chapman et al. reference discloses the pad base being aligned in a plane parallel to the plane of the curves of the cells (Fig. 4).

Regarding claim 31, the Chapman et al. reference discloses

- a. each cell having a central portion spaced from the ends of its length (Fig.1), and
- b. the central portion having a central axis offset from a linear axis extending between the ends (Fig. 1).

Regarding claim 32, the Chapman et al. reference discloses

- a. each cell having a central portion spaced from the ends of its length (Fig. 1);
- b. the central portion being restrained to the pad base (Fig. 4); and
- c. the central portion being offset from an axis extending between ends of its length (Fig. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 16, 18, 19, 21-26, and 35, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al. in view of Chapman et al.

Regarding claim 16, the Cook et al. reference discloses a pressure pad (Fig. 1) including:

- a. a pad base (Figs. 5A-5C);

b. at least two sets of alternately inflatable cells (1,2) atop the pad base (Figs. 5A-5C), the cells having lengths extending between opposing cell ends across the pad base (Figs. 1,2,6);

c. loops (e.g. 20) extending about the cells and restraining the cells to the pad base (Figs. 5A-5C), the loops being spaced from the cell ends (Figs.1,2,6); and

d. fasteners at the cell ends (23), the fasteners being affixed to the pad base (Figs. 5A-5C) wherein:

(1) the cells are tensioned along their lengths (e.g. at least the material is tensioned from inflation).

However, the Cook et al. reference fails to explicitly disclose the loops and the fasteners bend the lengths of the cells into curved shapes between the loops and the fasteners.

The Chapman et al. reference, an inflatable pad assembly, discloses providing bends in each cell (Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide bends in the cells of the Cook et al. reference in view of the teachings of the Chapman et al. reference in order to provide a greater length of each cell in contact with the body with improved comfort since more of the patient is supported at any one time (Chapman et al., Page 2, Lines 29-31).

Regarding claim 18, the Cook et al. reference, as modified in claim 16, discloses the loops extending about one of the cells having central axes which are offset from a linear axis extending between the fasteners of the cell (Chapman et al., Fig. 1).

Regarding claim 19, the Cook et al. reference, as modified in claim 16, discloses the loops extending about one of the cells having central axes which are offset from a linear axis extending between the fasteners of the cell, the offset extending in a direction oriented at least substantially perpendicularly to the linear axis extending between the fasteners of the cell (Chapman et al., Fig. 1).

Regarding claim 21, the Cook et al. reference, as modified in claim 1, discloses the cells being adjacently arrayed such that the bent cells are interfit, with the bend of each cell receiving, and/or being received within, the bend of an adjacent cell (Chapman et al., Fig. 1).

Regarding claim 22, the Cook et al. reference, as modified in claim 16, discloses the bends of the cells receiving adjacent cells therein (Chapman et al., Fig. 1).

Regarding claim 23, the Cook et al. reference discloses a pressure pad (e.g. Fig. 1) including:

- a. a pad base (Figs. 5A-5C);
- b. at least two sets of alternately inflatable cells (e.g. 1 and 2) atop the pad base (Figs. 5A-5C), the cells having lengths extending across the pad base (Figs. 5A-5C), wherein the lengths of the cells are restrained (Figs. 5A-5C):

- (1) at or near the middles of their lengths (Figs. 1,2,6), and
- (2) at or near the ends of their lengths (Figs. 1,2,5A-6).

However, the Cook et al. reference fails to explicitly disclose bends in the lengths of the cells.

The Chapman et al. reference, an inflatable pad assembly, disclose providing bends in each cell (Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide bends in the cells of the Cook et al. reference in view of the teachings of the Chapman et al. reference in order to provide a greater length of each cell in contact with the body with improved comfort since more of the patient is supported at any one time (Chapman et al., Page 2, Lines 29-31).

Regarding claim 24, the Cook et al. reference, as modified in claim 23, discloses

- a. the sets of cells having their lengths adjacently arrayed (Chapman et al., Fig. 1), and
- b. at least some of the cells having adjacent cells situated within their bends (Chapman et al., Fig. 1)).

Regarding claim 25, the Cook et al. reference, as modified in claim 23, discloses the bends of the cells resting in a common plane (Chapman et al., Fig. 1).

Regarding claim 26, the Cook et al. reference, as modified in claim 26, discloses the bends of the cells resting in a common plane (Chapman et al., Fig. 1).

Regarding claim 35, the Cook et al. reference, as modified in claim 23, discloses

- a. the lengths of the cells being restrained at or near the middles of their lengths by loops extending from the pad base about the cells (Cook, e.g. 4 and 20); and
- b. the lengths of the cells being restrained at or near the ends of the their lengths by fasteners (Cook, e.g. Col. 3, Lines 41-48) affixing the cells to the pad base.

9. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman et al. in view of Cook et al.

Regarding claim 33, the Chapman et al. reference discloses the invention substantially as claimed in claim 32.

However, the Chapman et al. reference fails to explicitly disclose the central portion being restrained to the pad base by a loop extending from the pad base about the central portion.

The Cook et al. reference, an inflatable pad assembly, discloses the use of loops (e.g. 5 and 20).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide loops to the Chapman et al. reference in view of the teachings of the Cook et al. reference in order to ensure that the cells are restrained.

Response to Arguments

10. Applicant's arguments filed 4/30/10 have been fully considered but they are not persuasive.

With regards to the applicant's argument of claim 34, the argument is not persuasive because the current disclosure does not have support for different cells being bent to different degrees between the middles and ends of their lengths.

With regards to the applicant's arguments of the Cook and Chapman references, the arguments are not persuasive because at least the material will be tensioned along their lengths due to inflation.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GILBERT Y. LEE whose telephone number is (571)272-5894. The examiner can normally be reached on 8:00 - 4:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shane Bomar can be reached on 571-272-7026. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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